

Name _____ Date _____ Hour _____

Module 2 - Sections 1 - 3 Quiz Review

2:1:1 Proportions and Percents

ESTIMATE using nice fractions or the 10% method. **SHOW ALL WORK!** (3 points each)

1) 79% of 200

2) 67% of 120

3) 18% of 155

2:1:2 Samples and Percent

Find the **EXACT** answer by using a proportion or equation. **SHOW ALL WORK!** (3 points each)

4) What is 50% of 64?

5) 12 is what percent of 36?

6) What is 7% of 20?

2:2:1 Estimating with Percents

7) A new jacket is on sale for 35% off. The original price was \$85. Find the sale price. (2 points)

2:2:2 Percent of Change

Calculate the percent of change. **SHOW ALL WORK!** Round to the nearest hundredth if necessary. (3 points each)

8) Old price: \$75
New price: \$63

9) Old price: \$16
New price: \$28

10) Old price: \$150
New price: \$132

2:3:1 Probability

11) A bag contains 7 red marbles, 3 green marbles, and 6 blue marbles. What is the theoretical probability for the following (1 point each):

- a) Pulling a red marble on the first draw?
- b) Pulling a green marble on the first draw?
- c) Pulling a black marble on the first draw?
- d) If the marble is not replaced after each draw, is pulling a green marble on the second draw dependent or independent of each other? EXPLAIN YOUR ANSWER. (2 points)

12) We will have school on Saturday. Circle one: This is an (impossible OR certain) event.

13) The type of event in #12 has the probability of _____ .

14) Mrs. Trendel will cheer for the Badgers. Circle one: This is an (impossible OR certain) event.

15) The type of event in #14 has the probability of _____ .

2:3:2 Experimental Probability

16) Two students pull marbles out of a bag 30 times. They pull a red marble 14 times, a green marble 8 times, and a blue marble 8 times. What is the experimental probability that they pulled a green marble? (1 point)

2:3:3 Tree Diagrams

17) Nicole is having dinner at Texas Roadhouse. She has the following menu choices to make: entrée choices are chicken, ribs, or steak; side choices are carrots, potatoes, or salad; and desert choices are cake or pudding.

a) Draw a tree diagram to show all of the menu combinations possible. (4 points)

b) What is the theoretical probability that Nicole will select chicken, carrots, and pudding? (1 point)